

Patent Claims

1. Use of a mixture of two, three or more straight-chain 1,2-alkanediols, the chain lengths of which (i) are different and (ii) in each case are in the range of 5 to 10 C atoms, as antimicrobial active compound.
2. Use according to Claim 1, wherein the proportions of the said diols in the mixture are set such that their antimicrobial action is synergistically intensified.
3. Use according to Claim 1 or 2, wherein the mixture contains 1,2-hexanediol and one, two or three further straight-chain 1,2-alkanediols, the chain length of which in each case is in the range of 5 to 10 C atoms.
4. Use of a mixture of
 - (a) 1,2-hexanediol and 1,2-octanediol,
 - (b) 1,2-hexanediol and 1,2-decanediol,
 - (c) 1,2-pentanediol, 1,2-hexanediol and 1,2-octanediol,
 - (d) 1,2-hexanediol, 1,2-octanediol and 1,2-decanediol or
 - (e) 1,2-pentanediol, 1,2-hexanediol and 1,2-decanediolas antimicrobial active compound, the proportions of the said diols in the mixture being set such that their antimicrobial action is synergistically intensified.
5. Use according to one of Claims 1 to 4, wherein the proportion of each individual diol is in the range of 1 to 99% (m/m), preferably in the range of 20 to 80% (m/m), based on the total mass of the mixture of the diols.
6. Method for the cosmetic and/or therapeutic treatment of
 - (a) microorganisms causing body odour,
 - (b) microorganisms causing acne and/or
 - (c) microorganisms causing mycoses,comprising the topical application of an antimicrobially effective amount of a mixture of two, three or more straight-chain 1,2-alkanediols, the chain lengths of which (i) are different and (ii) in each case are in the range of 5 to 10 C atoms,

wherein the proportions of the said diols in the mixture are set such that their antimicrobial action is synergistically intensified.

7. Use of a mixture of two, three or more straight-chain 1,2-alkanediols, the chain lengths of which (i) are different and (ii) in each case are in the range of 5 to 10 C atoms, wherein the proportions of the said diols in the mixture are set such that their antimicrobial action is synergistically intensified,

- (a) for the cosmetic treatment of microorganisms causing body odour,
- (b) for the cosmetic treatment of microorganisms causing acne,
- (c) for the cosmetic treatment of microorganisms causing mycoses,
- (d) for the treatment of microorganisms on or in inanimate material or
- (e) for the preservation of a perishable product.

8. Use of a mixture of two, three or more straight-chain 1,2-alkanediols, the chain lengths of which (i) are different and (ii) in each case are in the range of to 10 C atoms, for the preparation of an antimicrobially active pharmaceutical agent, wherein the proportions of the said diols in the mixture are set such that their antimicrobial action is synergistically intensified.

9. Use according to one of Claims 1 – 8, wherein an antimicrobial active compound is used as a further constituent of the mixture in an amount at which the antimicrobial action of the alkanediol mixture is synergistically intensified, the further antimicrobial active compound not being a straight-chain 1,2-alkanediol.

10. Antimicrobial composition, comprising:

- (a) as antimicrobial active compound, a mixture of two, three or more straight-chain 1,2-alkanediols, the chain lengths of which (i) are different and (ii) in each case are in the range of 5 to 10 C atoms,

and

- (b) an excipient compatible with the said mixture and optionally
- (c) a further antimicrobial active compound that is not a straight-chain 1,2[lacuna]alkanediol.